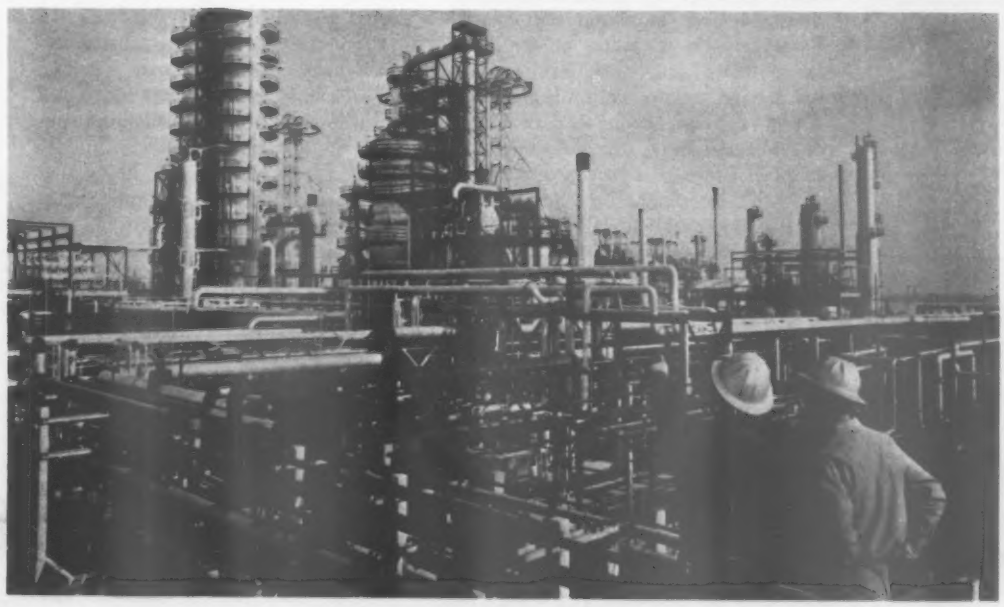
FOREIGN AGRICULTURE

energy and world agriculture



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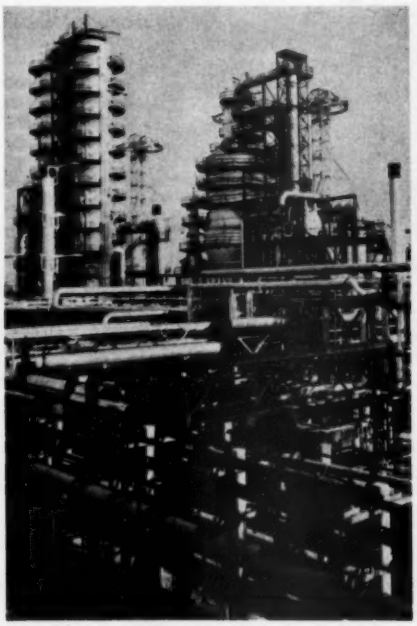
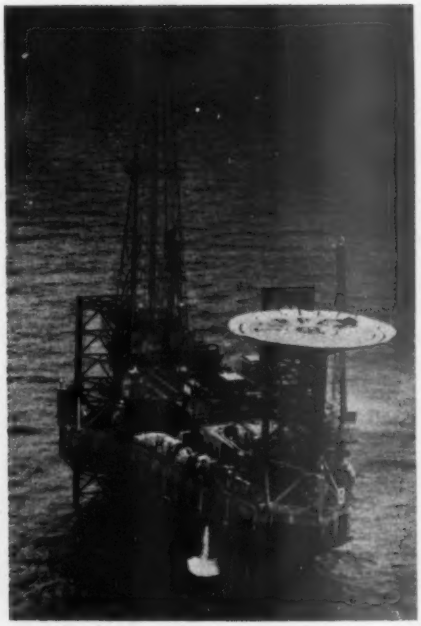
farm trade: the energy crunch

Energy Problems Challenge World's





By REED E. FRIEND
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Shortages and sudden price increases for energy that surprised the world last October have jolted agricultural production and trade at almost every level. Paralleling the situation at the farm level, where fuels and fertilizer are scarce and costly, political and economic repercussions are underway that could significantly alter present world trading patterns and growth trends.

Since October 1973, the posted price of Persian Gulf light crude petroleum has almost quadrupled. If the volume of oil imported is the same in 1974 as in 1973, the 170-percent increase in the landed price means that the world's petroleum import bill will be over $110 billion. At pre-October prices it would have been about $45 billion.

Although most Arab oil-exporting countries lifted the embargo on U.S. shipments in mid-March, high world prices for petroleum imports are not expected to ease.

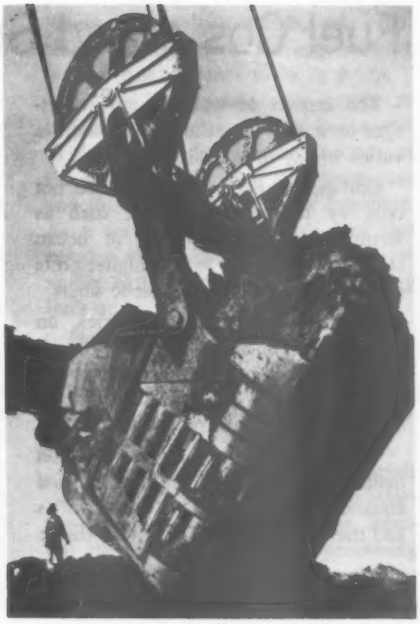
For U.S. agricultural exports, the tight energy situation has critical implications—both positive and negative. Some positive factors that could keep global demand for U.S. farm exports at a high level in coming months include:

- World governments may find it difficult to curtail agricultural imports, especially in the face of rising inflation caused in part by higher-cost fuel.
- To conserve foreign exchange reserves, some countries may increase self-sufficiency in livestock products and thus step up imports of feedgrains, soybeans, and other feedstuffs.
- Shortages of manmade fibers may increase world cotton consumption, thus benefiting U.S. cotton exports.
- A shortfall in fertilizer availability may increase grain needs in developing countries.

On the other hand, some effects of the energy shortage could dampen U.S. farm export prospects:

- Expected slowdowns in world GNP rates may curtail consumer disposable income.
- The changing value of the dollar—caused by the relatively low dependency of the United States on petroleum

Agriculture



imports—has made U.S. goods somewhat more expensive on international markets.

- Much higher freight rates, both for domestic and ocean transport, will increase delivered prices.
- Massive balance-of-payments deficits may cause oil importers to restrict or reduce imports.

Also, there are other uncertainties—such as weather—that could alter the outlook either positively or negatively.

At the moment, however, the plus factors seem to have a slight edge. U.S. agricultural exports for fiscal 1974 were recently estimated to total $20 billion, nearly $7 billion above those of a year earlier. A tentative estimate for fiscal 1975 is a slightly lower $17-19 billion—still second highest in history.

In the final analysis, the level of demand for U.S. farm products in foreign importing countries depends on some as-yet unanswered questions. What is the elasticity of demand for specific U.S. farm commodities in various markets? What adjustments will oil-importing countries make to cope with higher fuel prices? Will special credit programs be initiated to cover balance-of-payments deficits? Where and how will oil earnings be reinvested by petroleum-exporting countries?

Most governments will give top priority to filling energy needs for producing, processing, and distributing agricultural products.

Nevertheless, shortfalls have surfaced at various levels of the food production and distribution chain. These include difficulties in obtaining adequate fuel oil for onfarm operations; problems in obtaining fuels for the transport of commodities, particularly bunker oil for ships moving on the high seas; curtailment of some food-processing activities through reduced hours of operation; and shortages of some essential chemicals—such as hexane used in processing soybeans.

More important than actual fossil energy shortages are the spectacular and sudden price increases for oil.

Farmers the world over are finding that prices of agricultural inputs—particularly petroleum and petroleum-based products—are sharply higher this season. Increasingly, agriculture is energy-intensive. Energy needs begin even before crops are planted—fertilizers, herbicides, and irrigation equipment are essential inputs. At harvest, tractors, combines, and grain drying equipment depend on petroleum fuels.

Farther along the food chain, processing, marketing, refrigerating, and transporting are energy-intensive—and more expensive this year. These higher prices increase production and transportation costs and heighten already strong inflationary tendencies throughout many countries of the world. In addition, the sharp petroleum price increases mean major balance-of-payments deficits for numerous countries.

The strain on reserves caused by oil purchases is dampening economic growth rates in many countries. Since economic interdependence is high—developed countries trade mostly with other developed countries—these economies tend to rise and fall together. Thus, export market competition could be keener, and import policies more restrictive, as each country strives to improve its balance of trade.

Real economic growth will drop sharply in many developed countries in 1974—the rate of growth is not expected to exceed 3 percent for most

West European countries.

The United Kingdom will be hardest hit; real economic activity may actually decline in 1974. Japan's real economic growth in 1974 may approximate 5 percent, the lowest rate since the late 1950's. Inflation is expected to continue at remarkably high rates, possibly doubling in most developed countries.

An economic slowdown leading to lower profits and higher unemployment could make trade negotiations more difficult this year. As was evidenced early in the energy crisis, countries tend to panic under certain circumstances, turning to measures which seem to them to protect their own interests. Bilateral agreements may be hastily negotiated. Developing countries—least able to afford higher energy prices and hard hit by a drop in food aid and credit programs—are likely to press harder for special trade concessions.

"At the moment, the plus factors seem to have a slight edge. A tentative estimate for U.S. agricultural exports in fiscal 1975 is . . . $17-19 billion—still second highest in history."

A massive shift of monetary resources from oil-importing to oil-exporting countries is signaled by the newly higher cost of petroleum. As a result, import demand and capital investment by oil-producing nations is on the up-swing as they seek to modernize and industrialize their economies. Many traditional trading patterns are likely to be altered by these developments.

The higher petroleum prices are affecting the economies of oil-importing, developing countries in several ways. First, these countries are paying higher prices for petroleum imports. Second, they face serious shortfalls in fertilizer and substantially higher prices from traditional suppliers—due at least in part to the energy crisis. Fertilizer is an essential input to production of the high-yielding grain varieties now rather widespread in developing countries.

This situation, added to reduced food aid availability and high foodgrain prices, could result in serious food shortages in some areas.

food and feed: impact varies

World Commodities Hit by High Fuel Costs and Supply Gaps

The impact of world energy shortages on major agricultural commodities varies widely in intensity.

Cotton, for example, is affected not only by higher input costs, such as fertilizer, but by shortages of ocean shipping, as well as by the higher costs of petroleum-sensitive synthetic fibers.

In the fats and oils industries, on the other hand, the world energy pinch is being felt only peripherally through the higher costs of oil-related inputs such as hexane and transport.

These are, however, certain common denominators in the current world fuel equation that relate to all commodities and the industries associated with them:

- A higher level of inflation, brought on chiefly by the higher costs of inputs both in agriculture and in manufacturing;
- Sharp increases in transportation costs, whether by rail, truck, ship, or aircraft;
- The threat of economic recession resulting from higher consumer prices and consequent reduced demand;
- Steadily rising world prices of fertilizer.

By major commodity groups, the current levels of energy availability around the world in recent months are creating these effects upon production and exports:

Cotton. World acreage is expected to increase in 1974, reflecting producer response to higher prices. However, it seems likely that much of the anticipated increase in acreage will be offset by lower yields, due to a drop in expected fertilizer supplies, more marginal land under cultivation, and other factors. Some delays in shipments of cotton from U.S. Gulf ports to Far East destinations are believed to be due in part to shortages of shipping space.

A major Japanese synthetic fiber producer extended an earlier production cut to 25 percent in January. Some Japanese chemical companies are planning to turn to Canada to utilize natural gas and tar sands for petrochemical feedstocks needed for their manmade fiber and other consuming industries. Price restructuring probably will cause shifts in demand levels.

Textile mills in Thailand were running below capacity because of a 15 percent cut in fuel supplies, and no manmade fiber shipments were received during the first week of February from Japanese suppliers.

In Portugal, the shortages of and high prices of polyester staple have caused mills to change cotton-polyester blend ratios and to require larger quantities of raw cotton. Higher prices and lack of ready suppliers for cotton have evidently prevented greatly increased purchases.

In South Africa, spinners are planning to use 330,000-340,000 bales of cotton this year, compared with 275,000 in the 1973 crop year. This increase in consumption is due in part to short supplies of textiles, which result from the 3-day workweek recently in effect in the United Kingdom and to the swing to natural fibers. The increased quantities needed by South Africa are believed to be available from the relatively large cotton crop in Rhodesia.

In the United Kingdom, some large cotton mills that previously had operated a Sunday shift were permitted, beginning with the first week in February, to operate 1 extra production day each week. Manmade fiber production in the United Kingdom is classified as a continuous processing industry, and as such is permitted to maintain 7-day-a-week schedules.

Austrian textile mills were cautiously optimistic in February as tight oil supplies appeared to ease somewhat. Higher-priced oil imports from the USSR, which diminish the need for

Material in this article was contributed by U.S. Agricultural Attachés and FAS commodity specialists.

Russian cotton to balance the USSR-Finnish trade agreement, provide an opportunity for much larger sales of U.S. cotton to Finland in 1974.

In Canada, the textile industry, which earlier expected no downturn, in February was experiencing shortages in energy and in fibers, which could result in a slight easing of cotton consumption.

There are three major factors relating to cotton's place in the world energy situation: Cotton should benefit from the slowdown in production of man-made fibers; fertilizer, an important element in cotton production, likely will not be in adequate supply; and the scarcity of shipping space for ocean transportation may pose a problem for moving cotton.

U.S. exports of cotton during the 1973-74 season are unquestionably being adversely affected by the lack of ocean transportation. At least three factors are involved: Shipping space is limited in relation to the total demand for transportation of all commodities, supplies of bunker fuel have been short, and some ships have been carrying less cargo in order to carry more bunker fuel.

Although the total of U.S. cotton exports and sales registered for export during the balance of the marketing year exceeds 6.5 million bales, actual exports in 1973-74 are currently estimated at 5.7 million bales. Unless the ocean transportation situation improves drastically soon, even the current estimate may be difficult to reach.

In the short run, cotton could actually benefit from the world energy situation, but the resulting reduced level of economic activity would adversely affect world demand for textiles and cotton.

On the whole, the economic disruptions in the cotton industry brought about by the petroleum shortage probably will be more moderate than was first anticipated when the world energy situation deteriorated markedly in second half 1973.

Dairy and poultry. Generally, energy shortages in the dairy sector show their most direct effects in processing plants, where fuel needs are relatively high for product conversion, sanitation, and refrigeration.

In the poultry sector, direct fuel needs include these functions as well as incubation and brooding.

Both sectors were affected by general transportation difficulties and cost run-ups, plus uncertainty over future feed availability and energy-related supplies.

In the United Kingdom, egg-packing plants and poultry-dressing plants have priority ratings under the Government's emergency plans for coping with power shortages. However, because the same priority does not extend to plants supplying packaging materials, the availability of those items for eggs and for poultry meat appears to be in doubt.

In the Netherlands, the supply of broilers for the domestic market as well as for export declined as a result of the combined effects of feed price rises and the shortage of fuel for brooding. As a result of these factors and also because of the disappointing prices prevailing early this year, stocks were being built up.

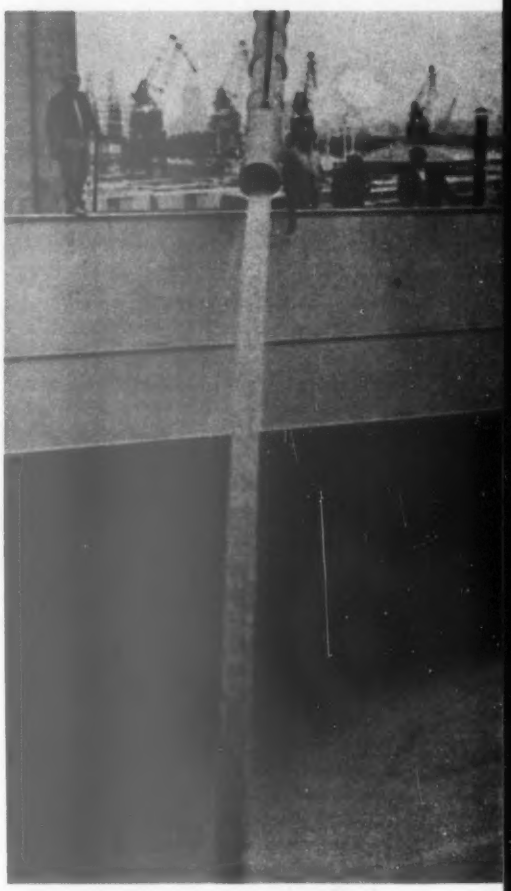
New Zealand reports that bunkering surcharges were increasing the transportation costs for exports of dairy products, with resulting lower net returns to producers.

In Switzerland, Government officials do not expect energy problems to interfere with agricultural production, internal transportation, or food processing this year. There are reportedly no fuel shortages, although standby rationing systems are being held in readiness and assurances have been given that agriculture will receive priority in any fuel rationing plan. Principal concern centers around the ability of foreign sources to deliver needed imports such as foodgrains, cotton, and livestock feeds—especially grain and protein meal.

In the event that the world supply situation and the need to conserve foreign exchange should become aggravated further, Switzerland would be prepared to increase total tilled acreage by plowing up level meadows and moving dairy production to uplands. If this fallback policy (for use in a crisis) should be invoked, an overall consumption cut of 20 percent is envisioned. As a commodity in net import status, poultry meat would very likely fall in this category.

The Danish dairy and poultry industries collectively have been turned down in their requests for liberal treatment under the fuel-restricting program, but applications from individual plants are being considered.

In West Germany, the recent doubling of fuel costs for brooding has increased costs for broiler growers.



Grain (top) is loaded for export at Buenos Aires. Belgian laying hens (above) in litter pen. World's grain and poultry industries are among those adjusting to increased input costs brought about in part by higher petroleum prices.

Cleaning and grading seed at experimental station operated at Pelotas, Rio Grande do Sul, Brazil. Seeds are tested for germination and purity.

The German broiler industry is an important user of heating oil. As of early March, there were no reports of actual hexane shortages, but prices were high and prospective availability was causing some concern in the industry.

Fruits and vegetables. Higher freight rates and charges on shipments between the United States and Europe are affecting the cost of refrigerated shipments. And higher bunker surcharges are in effect. These developments are depressing the competitiveness of U.S. fruits and vegetables in foreign markets. One lettuce shipper, for example, contends that further increases of this type will force his company to drop out of the export business.

In the United States, there have been no losses or problems in export due to the fuel shortage, but there are, however, some scattered reports of disturbances. Domestic canners have been most concerned over fuel oil allocations, as well as by the possibility of shortages of cans and other packaging materials.

Some growers in the Pacific Coast area are expressing concern over the availability of emergency fuel for orchard heating in case of threat of frosts.

Grain and feeds. About 55 percent of world grain production is harvested in the free-market developed countries, in the countries of Eastern Europe, and in the USSR. The remaining 45 percent is produced in developing countries. It is this second group that faces the most uncertainties in the coming crop year, since these countries may have the most difficulties with high input costs, especially fertilizer.

Rice is especially crucial to the developing countries. Traditional varieties of rice are rather unresponsive to fertilizer. The high-yielding varieties developed by the International Rice Research Institute require substantial amounts of fertilizer, but these account for only 10 percent of the sown area of south and southeast Asia.

Brazil is making standby plans to control energy, but sees no grain crisis nor long- or short-run problems. No effect on U.S. agricultural exports to Brazil is anticipated. Farmers and the food industry will have priority if rationing becomes necessary.

Yugoslavia relies on Arab oil for only one-third of its supplies. However, concern is being expressed by the Yugoslavs that increased oil prices will result in a new wave of price increases and a further rise in inflation because of higher cost of imports from countries greatly affected by the increased cost of oil.

Thailand's rice mills are operating at normal capacity. Domestic wholesale prices of corn increased as of December 31 because higher fuel prices caused an increase in inland transportation costs.

Italy's February-March fuel supply situation appears good. Planting and sowing in southern Italy appears either delayed or undone, but real damage to date is considered to be minor. Fertilizer prices increased by 48 percent, and prices of fuels have more than doubled.

India has a shortage of fertilizer, now estimated at 30 to 40 percent of minimum requirements, for spring crops. Any adverse effect upon crop production may have to be compensated for by additional imports of foodgrains. Another problem is that the increased demand for foreign exchange to buy oil will inevitably interfere with economic development programs.

In Canada, the Wheat Board doubts that grain movement targets will be met unless more rail cars can be channeled to the grain trade.

There is pressure for more grain to be moved into eastern Canada for domestic consumption. The Board already has deferred shipment of 15.5 million bushels of grain to foreign customers so western feedgrain may reach eastern centers.

The Board reports that transportation problems have probably blocked 75 million bushels of foreign sales. In December, cargo ships were on the verge of refusing to come to Vancouver because of lack of bunker fuel.

South Africa may have the worst problems, due to the embargo. One U.S. ocean cargo line says bunker fuel was virtually unavailable at Capetown, and all the company's South Africa-bound ships early this year were carrying additional fuel in cargo tanks.

Australia in December reported no actual shortages of fuel, but problems were expected to arise because almost all bunker fuel is imported. The Australian Wheat Board is essentially concerned over future shipments to Japan and Singapore, since bunker fuel is in short supply in both places. The Board also reports problems in obtaining bunker fuel in Zambia and in Iraq.

Argentina appears to be in relatively good position, since it is 90 percent self-sufficient in oil and most of the remaining 10 percent comes from nearby sources in South America.

Fats and oils. The energy situation still is not causing serious problems in the vegetable oil industries in most countries. The sharply increased costs of inputs seem to be the major problem facing processors of agricultural commodities.

In Taiwan, soybean crushers were notified in February that fuel oil sup-

plies this year will be fixed at a rate equal to 80 percent of consumption in the third quarter of calendar 1973. Crushers anticipated a reduction in output, and notified feed mills that they could not deliver previous quantities of soybean meal. Taiwan imported 533,621 metric tons of U.S. soybeans in 1972.

While the two soybean crushers in Denmark had not been compelled to cut production as feared earlier, one plant reported in February that it was threatened by shortages of soybeans, as it was completely dependent upon regular shipments. Increased input costs will have their full effect on endproduct prices in a few months' time, but reduced consumption is not anticipated by the crushers. Denmark imported 474,073 metric tons of U.S. soybeans in 1972.

The Portuguese soybean crushing industry in February noted the possibility of a hexane shortage. Hexane prices were going up, but this development was not expected to affect soybean crushings. Portugal is not a large importer of soybeans, and took only 11,349 metric tons in 1972, one-fourth of the average imports of the 3 previous years.

The 1974 copra crop in the Philippines is not affected by the fertilizer shortage because very little is used on coconut palms. Coconut crushing is being held down because of a smaller crop and a strong export demand for copra, and not because of any fuel oil shortage. Estimated 1974 copra production (oil basis) totals 1 million metric tons, about 10 percent below the 1973 volume. The Philippines is the world's largest producer of copra.

In the southern Caribbean, feed compounders in January were facing much higher prices for Japanese feed additives—byproducts of the petroleum industry.

In Norway, exports of fishmeal at the end of 1973 were being slowed by shortages bunker fuel.

On the whole, the energy shortage could have both beneficial and harmful effects on U.S. fats and oils exports. Some negative factors:

- Exports of U.S. soybeans could be reduced by shipping bottlenecks resulting from shortages of bunker oil.
- The gross national product in industrialized countries could suffer as a result of inadequate energy, which in turn could reduce disposable consumer income, the demand for red meat, and hence for protein meal.
- Shortages of fuel in certain important poultry-producing countries such as the Netherlands, Denmark, and West Germany could be a limiting factor in the production of chicks for broilers and layers, and therefore could negatively influence the demand for protein meal.
- Shipping difficulties were reported in early January to be hampering the movement of carbohydrate feeds, such as tapioca from Thailand to West Germany. A reduced supply of carbohydrate feeds could reduce the demand for soybean meal in countries such as the Netherlands.

If shortages of fuel and solvents, such as hexane, develop in countries that crush soybeans, the potential foreign crush would be reduced and similarly the demand for U.S. soybeans.

Some positive factors are:

- Shortages of fuel shipped for processing could adversely affect U.S. competitors such as Argentina, Brazil, Nigeria, and India. To the extent that such suppliers are more seriously handicapped than the United States, the demand for U.S. beans and/or products would benefit.
- Apprehension over shortages tends to stimulate scare buying.
- The demand for soybean meal and oil, as such, would benefit if foreign crushers should be unable to process soybeans or other oilseeds.
- On the domestic market, the fear of a urea shortage appears to have stimulated buying of cottonseed meal and soybean meal. Reportedly, feedlot operators are buying meal through June —not necessarily because urea is less competitive but because of the uncertainty of availability.

The hexane supply has been suggested as a potential problem in several countries. In December, it was reported that there might be a 50 percent price rise for hexane in Spain.

The Dominican Republic's one soybean extraction plant was in early December trying to contract for its 1974 hexane supply. Without adequate hexane, the plant's anticipated 18,000 metric tons of soybean imports from the United States in 1974 would be drastically reduced, and probably would require imports of finished products to meet basic needs. Also, Korea in early December, with less than a 3-month supply of hexane on hand, had its contract with Japan cancelled.

WORLD PRODUCTION AND TRADE OF MAJOR CROPS, 1971/72-1974/75

Commodity	Unit	1971-72	1972-73	1973-74 estimate	1974-75 forecast[1]
Wheat:					
Area	1,000 ha.	210,608.0	207,608.0	216,939.0	225,100.0
Yield	qu./ha.	16.2	15.9	16.6	16.8
Production	1,000 tons[2]	340,555.0	330,933.0	360,230.0	378,800.0
Trade	do	56,400.0	73,900.0	71,300.0	69,700.0
Feedgrains:					
Area	1,000 ha.	262,511.0	259,619.0	265,623.0	272,400.0
Yield	qu./ha.	21.3	21.0	22.0	22.7
Production	1,000 tons	560,417.0	545,284.0	584,115.0	619,600.0
Trade	do	54,200.0	61,800.0	65,800.0	65,900.0
Rice:					
Area	1,000 ha.	133,502.0	128,865.0	130,403.0	134,000.0
Yield	qu./ha.	22.4	22.2	23.6	22.8
Production	1,000 tons	299,435.0	285,503.0	307,118.0	305,000.0
Trade	do	11,600.0	10,960.0	11,100.0	11,400.0
Oilseeds:					
Area	1,000 ha.	73,479.0	74,122.0	81,251.0	81,465.0
Yield	qu./ha.	11.1	11.0	11.8	12.1
Production	1,000 tons	81,877.0	81,713.0	95,684.0	98.157.0
Trade [3]	do	20,370.0	22,810.0	25,645.0	27,465.0
Cotton:					
Area	1,000 ha.	32,726.0	33,221.0	32,724.0	34,197.0
Yield	qu./ha.	3.8	3.9	4.0	3.9
Production	1,000 tons	12,443.0	12,907.0	13,061.0	13,499.0
Trade	do	3,987.0	4,463.0	4,398.0	4,245.0
Total area	1,000 ha.	712,747.0	703,501.0	726,652.0	747,162.0

[1] Based on conditions at the end of February 1974. [2] All tons are metric. [3] Meal basis.

fertilizer: world demand strong

Shortages of Fertilizer Linked To Tight Energy Supplies

By RICHARD B. REIDINGER
and DAVID M. BELL
Economic Research Service

The fertilizer crunch, which took many of the world's farmers by surprise last year, is closely related to shortened availability and high prices of energy. Currently, nearly 90 percent of world nitrogen fertilizer production depends directly on natural gas or petroleum products. Phosphate and potash fertilizers—both derived from mineral products—require petroleum and electric power in mining, extraction, and processing.

Basic to easing of the fertilizer situation is the development of new production capacity. Yet to develop capacity, producers must be assured of sufficient raw materials and inputs—particularly energy. Moreover, transportation of fertilizer, a bulk commodity, both within the United States and to deficit areas abroad, is emerging as a problem of great concern, particularly in time for the spring planting season.

Worldwide, fertilizer supplies in 1974 will be hard pressed to keep pace with higher demand. The quantity of nitrogen fertilizer demanded is likely to jump to 40.6 million metric tons in 1974, a gain of 11 percent over last year. Phosphate demand is expected to gain 7 percent to 25.1 million tons and potash consumption 5 percent to just over 19.4 million tons.

Estimates for 1974 indicate that world **nitrogen** production will climb to 41.5 million tons. In 1973, nitrogen output reached an estimated 38.3 million tons, while consumption rose to 36.5 million.

World nitrogen supplies could exceed consumption by nearly a million tons in 1974. This level of supply is still only about 2 percent above expected consumption and low by historical standards. This tight supply-demand balance will result in severe shortages in certain areas, considering market imperfections, transportation problems, and other problems and delays.

But shortages are likely to hit hardest in the developing regions of the world, which can afford it least. These regions—traditionally fertilizer-importing countries—are the People's Republic of China (PRC), North Vietnam, North Korea, Mongolia, and other developing regions of Latin America, Africa, and Asia.

NET NITROGEN FERTILIZER TRADE BALANCE 1967-72[1]
[In 1,000 metric tons]

Region	1967	1968	1969	1970	1971	1972
North America	236	517	1,107	835	572	581
West Europe	1,823	1,796	2,069	1,642	1,569	1,334
East Europe and USSR	−91	9	82	218	399	752
Japan	934	1,043	889	1,234	1,415	1,270
Other developed[2]	−91	−118	−109	−9	0	−109
Total developed	2,811	3,247	4,038	3,920	3,955	3,828
Latin America	−336	−471	−508	−481	−590	−626
Developing Africa	−290	−381	−390	−399	−390	−544
Developing Asia	−1,207	−1,705	−1,560	−1,470	−1,080	−1,188
Total developing[3]	−1,833	−2,557	−2,458	−2,350	−2,060	−2,358
Other Asia[4]	−1,098	−735	−1,297	−1,452	−1,723	−1,542

[1] Positive numbers imply net exports, negative numbers imply net imports. [2] Includes South Africa, Israel, and Oceania. [3] Excludes Other Asia. [4] Includes People's Republic of China, Taiwan, North Vietnam, North Korea, and Mongolia. Source: TVA.

ESTIMATED WORLD FERTILIZER PRODUCTION, DEMAND, AND BALANCE, 1974
[In 1,000 metric tons]

Region	Nitrogen			Phosphate			Potash		
	Production	Demand	Balance	Production	Demand	Balance	Production	Demand	Balance
North America	10,070	9,526	544	6,650	5,352	1,298	8,246	4,672	3,574
West Europe	10,433	7,439	2,994	6,024	6,123	−99	5,271	5,108	163
East Europe and USSR	10,523	10,161	362	7,267	6,169	1,098	7,004	6,514	490
Japan	3,447	907	2,540	835	835	0	0	680	−680
Other developed countries[1]	635	544	91	1,706	1,833	−127	871	363	508
Developed regions	35,108	28,577	6,532	22,482	20,312	2,170	21,392	17,337	4,055
Latin America	1,270	1,905	−635	735	1,343	−608	0	962	−962
Developing Africa	454	907	−453	889	417	472	336	172	164
Developing Asia	3,357	4,627	−1,270	816	1,733	−917	0	717	−717
Developing regions[2]	5,080	7,439	−2,359	2,440	3,493	−1,053	336	1,851	−1,515
Other Asia[3]	1,361	4,536	−3,175	1,288	1,334	−46	100	227	−127
World	41,549	40,642	998	26,210	25,139	1,071	21,836	19,415	2,413

[1] Includes South Africa, Israel, and Oceania. [2] Excludes Other Asia. [3] Includes People's Republic of China, Taiwan, North Vietnam, North Korea, and Mongolia. Source: TVA and unpublished USDA estimates.

Most developed regions are expected to have adequate supplies, especially traditional exporters such as Japan and Western Europe, where plant utilization rates are near capacity.

In 1972, less developed countries utilized only 66 percent of capacity in nitrogen production, 58 percent in phosphate, and 60 percent in potash. Utilization of existing plants is hampered by unavailability of raw materials, electric power fluctuations and shortages, labor problems, faulty equipment, and other problems.

As a group, less developed countries depend on imports for about a third of their nitrogen and phosphate supplies. Because abilities to purchase on world markets vary, some countries will be more severely affected by reduced supplies than others.

Recent reports suggest that, of the major importing countries, India, Pakistan, and Bangladesh are most likely to suffer from below-normal crop production resulting from fertilizer shortages. But much will depend on purchases in the next few months, and even with fertilizer shortages, good weather could produce record crops in these countries.

World fertilizer prices are expected to remain high, slowing consumption rates. Countries able to pay for supplies will probably get the nitrogen fertilizer they need, whereas economically weak countries will have to accept reduced supplies.

In an effort to minimize shortages, some governments are allocating fertilizer to specific crops to maximize benefits from the limited available supplies. To perform well, the high-yielding wheat and rice varieties—most successful of Green Revolution crops—require high fertilizer application rates, as well as irrigation. Without adequate fertilizer and irrigation, these varieties do little better than traditional varieties. As a result, agricultural growth could slow in countries where needs are high.

An even more serious situation could develop if nitrogen fertilizer consumption rises more than expected, or if production falls below expected levels.

In the past, production capacity has seldom reached the levels assumed for this year—95 percent of capacity in developed countries and 70 percent in developing regions. In 1972, capacity utilization was 92 percent in developed countries and 66 percent in developing nations that are manufacturers.

Helicopter dusts Japanese onion field at Sapporo.

The high level of prices on world markets should encourage higher operating levels, however. Prices for some nitrogen fertilizer products have jumped more than 200 percent since 1971.

But world efforts to increase crop production are strong. High prices for crops are stimulating heavier fertilizer applications. Should the nitrogen fertilizer supply be lower than estimated—or demand exceed that estimated—very severe fertilizer deficits could occur in developing countries, and the small world nitrogen surplus could disappear.

World **phosphate** production reached an estimated 23.7 million tons in 1973 while consumption reached 23.4 million tons. Estimates for 1974 indicate that output will rise to 26.2 million tons while the quantity demanded will climb to 25.1 million tons.

The resulting 1974 surplus of about 1.1 million tons is still only 4.3 percent of expected consumption. This is well above the 1 percent surplus estimated for 1973 but still below average for the past decade.

Tight supplies will keep considerable upward pressure on phosphate fertilizer prices. For diammonium phosphate, prices have tripled since 1971.

Largest deficit regions for phosphate fertilizers include Latin America and developing areas of Asia. Developing Africa has a significant surplus of phosphate fertilizer, primarily due to rising production capacity in North African countries.

Eastern Europe and the USSR have also increased capacity considerably. These two regions and the United States will account for most of the phosphate exports in 1974.

World production of potassium fertilizer, or **potash,** was an estimated 21.5 million tons in 1973, with consumption estimated at 18.4 million tons. In 1974, production is expected to increase to 21.8 million tons and consumption to 19.4 million tons.

Potash production is concentrated in only a few countries, so trade is considerable.

Canada, the world's leading potash exporter, utilizes only about 70 percent of available production capacity. With this substantial capacity surplus, potash prices are not high, compared to nitrogen and phosphate fertilizers, so that few countries will encounter difficulties in meeting potash needs.

transport: shippers pay more

Higher World Transport Charges Are Adding to Commodity Prices

Higher freight charges and rates—both domestic and international—are adding to the delivered prices of U.S. farm commodities.

World transportation costs, always responsive to fluctuations in prices of petroleum fuels, have bounded up in recent months. Whether by water, rail, or highway, it now costs more to move commodities to their markets.

Some ocean transportation costs—grain, for example—have stopped rising and have decreased slightly in recent weeks, but there appears to be little or no likelihood that these costs will drop to levels in effect prior to October 1973.

Most ocean shipping rates, however, were two to four times higher in January than in the previous October.

A series of advances in the prices of gasoline and diesel fuel is reflected in the new and higher rates and charges posted both in the United States and abroad by railroads, truck lines, and air carriers. Contract carriers and common carriers alike are seeking to recoup their higher fuel costs through higher rates and charges.

The net effect of these increases is higher consumer prices. And virtually every agricultural commodity and product is affected. Nearly all the world's freight transportation today is powered by internal combustion, turbine, or jet engines. And all are powered by petroleum fuels.

Since there apparently is no short- or even medium-term alternative fuel for powered transport, the only response open to oil importers is to suppress the demand for so-called nonessential transportation (usually private consumer travel) and to pay the price for transportation in the "essential" category.

In view of the magnitude of the recent petroleum price increases, it is unlikely that even the most extreme conservation policies would be sufficient to head off substantially higher fuel bills for the world's industrialized, free-market countries. These higher fuel costs have three major implications:

- A slowdown in industrial production—especially in automotive production—which will depress growth in other sectors.
- Higher transportation costs, which will feed already high inflation rates.
- Worsening balance-of-payments problems, which will create pressures on currency values.

One of the most pressing immediate problems facing exporters of U.S. agricultural commodities is the shortage of general-cargo ships for moving cotton from Gulf ports to the Far East and other cotton-consuming localities. The problem centers both on the availability of ships and, until recently, of bunker fuel.

In the fourth quarter of 1973, bunker fuel was in short supply at many ports, due to informal rationing throughout the world. Although the supply situation has eased, prices clearly are not going to revert to pre-October 1973 levels.

In order to conserve fuel, some ocean transportation companies have ordered their ships to cut speeds substantially. While this move cuts fuel consumption by as much as one-third, it causes overhead costs to rise far in excess of the value of the fuel saved.

These added costs are partially recouped through bunker surcharges, which are added to regular shipping charges. In December, virtually every U.S. ocean freight conference added bunker surcharges of from 5 percent to 25 percent of base cargo charges.

Despite some earlier pessimism in the shipping industry over supplies of bunker fuel, U.S. agricultural exports have not been significantly affected. In November and in early December, for example, combined U.S. exports of wheat, feedgrains, and soybeans averaged nearly 2 million metric tons per week—by far the largest volume ever recorded in a similar period. At the same time, only four grain ships were reported to have been delayed at U.S. ports by lack of fuel.

Export movement of grain is closely related to availability and price of diesel fuel. Many foreign ships are driven by diesel-fueled internal combustion engines, and nearly all commercial U.S. grain exports move by ships of foreign registry.

Commodities shipped by rail also are moving at higher rates. In the United States, grain shippers in February were facing separate rate increases totaling as much as 18 percent. These include:

- A 2.1 percent fuel surcharge, effective January 31.
- A 5 percent across-the-board increase in all rail rates, effective February 22.
- A 10 percent rate increase on shipments of grain bound for export, effective February 22. This increase, to be

Material in this article was contributed by U.S. Agricultural Attachés and FAS commodity specialists.

SELECTED U.S. RAIL RATES: GRAIN FOR EXPORT

[In cents per bushel]

Commodity	Sept. 1973	Feb. 1974
Wheat from Great Falls, Mont., to Portland, Oregon	44.4	51.3
Soybeans form Decatur, Ill., to New Orleans	29.4	34.7
Corn from Des Moines, Ia., to Houston	27.4	32.3

FREIGHT RATES, U.S. GULF PORTS TO SELECTED FOREIGN PORTS

[U.S. dollars per metric ton]

Destination	1973 Oct. 1	1973 Nov. 5	1973 Dec. 3	1974 Jan. 7	1974 Feb. 4
Rotterdam	13.75	20.50	20.00	22.25	17.50
Hamburg	14.00	21.00	20.50	22.75	18.00
India	41.00	42.00	42.00	44.75	44.00
Japan	30.00	34.50	33.00	37.75	39.25

in effect for 1 year, is limited to 6 cents per hundredweight.

Country elevators report some problems in moving their grain by rail, due to the unavailability of cars. Some elevators are shipping by truck, even though truck shipping rates and charges are 15-45 cents per bushel higher than by rail.

Barge lines thus far have experienced only minor fuel problems. Some Mississippi barges carry grain on southbound trips and fuel on northbound trips.

Of the total $20 billion worth of U.S. agricultural commodities moving into export trade in fiscal 1974, about $17 billion worth is represented by only four commodity groups—grain and feed, oilseeds and products, cotton, and livestock and meat products.

Exports of U.S. fresh fruits and vegetables account for about $1 billion annual value. These perishable commodities are usually shipped in high-speed container ships that arrive at destination ports 3 to 4 days earlier than previously was possible.

The $20 billion total value in commodities for export represents a physical volume of about 94 million metric tons. This enormous quantity—about 2 percent larger than in fiscal 1973—is moving to market despite the problems of fuel availability and sharply higher fuel costs that have been added to the commodity transportation equation since October 1973.

U.S. agricultural export pipelines are filled, and are likely to remain so throughout calendar 1974. With assurances of continued availability of fuel supplies both at home and abroad, the huge task of moving farm commodities and products to their world markets can move forward to the mutual benefit of producer and consumer groups alike.

Flour loaded for export at New Orleans (left). Canadian wheat fields at harvest time (below). Both ship and rail rates are up in response to higher fuel prices.

the ldc's: new pressures

Less Developed Nations Hard Hit By Oil Costs

The higher costs of essential imports —fuel, food, and fertilizer—could aggravate food problems and curtail agricultural development in many of the world's less developed countries (LDC's), according to recent reports.

In 1974, imports of petroleum, food, and fertilizer will cost LDC's $15 billion more than last year, James P. Grant, president of the Overseas Development Council (ODC), estimates.

For oil alone, Grant says, petroleum-importing, developing nations could spend $15 billion, compared to $5.2 billion in 1973—if consumption rises at the average annual 8 percent rate. In 1973, 15 percent of all oil exported by members of the Organization of Petroleum Exporting Countries (OPEC) went to developing countries.

For nitrogen and phosphate fertilizers, import costs could advance by more than $500 million, assuming supplies are available on world markets, Grant asserts.

Thus, developing countries' expenditures for food and fertilizer imports in crop year 1973-74 will be $5 billion higher than in the previous season. Increased costs for wheat imports alone are estimated by the ODC at well above $3 billion.

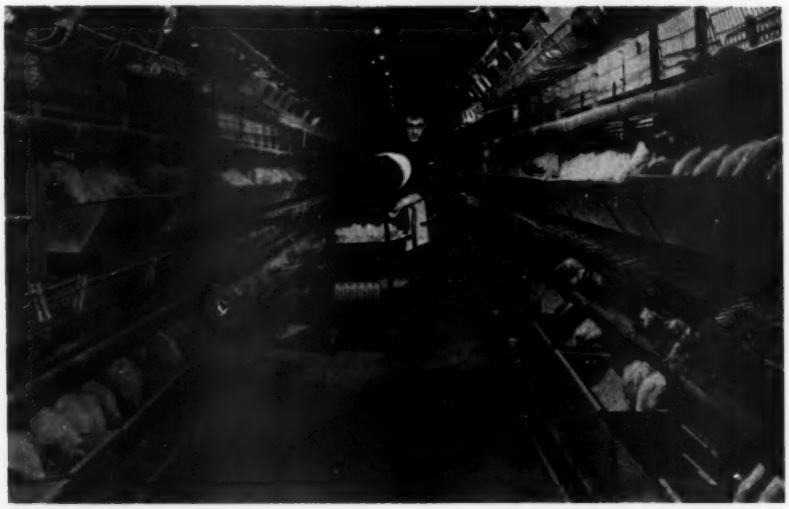
The impact of the price increases varies greatly among individual developing countries, says Grant. He places LDC's in one of four categories, according to the relative impact of oil price increases.

The first category, oil exporters, obviously will benefit, he asserts. Countries in a second group—not seriously injured by oil price rises—include the People's Republic of China, Colombia, Mexico, Bolivia, Brazil, Ecuador, Peru, Malaysia, Morocco, Tunisia, Zambia, and Zaire.

Third are countries that are closely

Continued on page 24

Energy Problems Trigger Economic Shifts in Top U.S. Farm Markets



United Kingdom: Egg collection.

United Kingdom

In contrast to favorable growth trends early in 1973, conditions in the United Kingdom deteriorated rapidly late in the year—resulting in severe economic crises. High rates of inflation, severe balance of payments deficits, shortages of fuel, and labor strikes in key sectors (coal, rail, and steel industries) disrupted the economy. Thus, the growth in real gross national product (GNP) in 1973, earlier estimated at 6.5 percent (to $97 billion) is likely to have been 5-6 percent. Experts predict that the economy could register zero—or negative—growth in 1974.

A major problem in the U.K. economy has been a rapid rise in inflation rates. The consumer price index, which increased 6.6 percent in 1972, rose sharply to 9.6 percent in 1973. Movements toward European Community (EC) prices (the United Kingdom joined the EC January 1, 1973), the introduction of a Value Added Tax, and sharply rising wages were cited as major causes of higher prices.

In 1973, the Government imposed a three-phase price and income policy—coupled with voluntary wage-restraint programs—which was temporarily effective. However, the effect of rising food prices, largely reflecting higher world prices, and the effects of EC membership contributed significantly to a recurrence of inflation in late 1973 and early 1974.

In an effort to control rising prices, caused in part by the shortage of imported fuels, the Government cut the work week to 3 days for most industries. This policy remained in force until early March, when a general election resulted in a Labor Party victory. A full 5-day work week was restored and a general coal miners' strike ended.

Cuts in Government spending, tight credit, and a surtax on incomes above a certain level are other measures that have been imposed by the Government to contain inflation.

The trade deficit, which was $1.7 billion in 1972, deteriorated in 1973 to about $3.5 billion. However, the deficit is likely to worsen, particularly in the first quarter of 1974, largely reflecting fuel price increases.

—By Marshall H. Cohen, ERS

West Germany

During the last quarter of 1973, West Germany's booming economy began to ease as a result of Government policy and the energy situation. The economy had become overheated as consumer-goods prices and wages soared, exports reached phenomenal levels, and monetary liquidity rose in response to excess currency speculation. Government policymakers followed an anti-inflationary program in 1973, but had to shift directions as unemployment began to rise and economic growth began to stagnate during the last quarter of 1973.

By the end of 1973, the Government was maintaining some measures to hold prices and costs down, while attempting to selectively stimulate the economy—mainly by encouraging investment. In December, a 2-percent investment tax imposed in May 1973 was removed. Also, tax benefits for construction of owner-occupied houses and apartments were reintroduced, and special tax benefits for investment in the coal-mining industry will be given.

Domestic demand is expected to decline substantially and unemployment rise in response to the oil shortage (one-seventh of the labor force is employed in the auto industry). Thus, the pressure to abolish the Government's economic stability program and reverse the Bundesbank's restrictive monetary and credit policy is increasing.

By the end of 1973, 480,000 West Germans were unemployed and 150,000 working "short time," compared to 330,000 and 105,000 respectively at the end of November. The unemployment rate for 1974 is forecast at 2.2 percent, compared with 1.2 percent in 1973.

Real GNP growth in 1973 was 5.5 percent with an inflation rate of 6 percent. Estimates for 1974 are quite gloomy and point towards zero to 2 percent real growth and inflation at 7-8 percent, unless the oil situation improves considerably.

—By Cynthia Breitenlohner, ERS

Denmark: Transport of milk.

Denmark

Economic expansion that began in 1972 continued in 1973. Real GNP in 1973 was estimated at about $22 billion, a 6-percent rise. Inflation and balance of trade deficits have been severe and policy priorities have been directed at controlling inflation and maintaining competitive export prices.

Prior to the energy situation, strong demand from both export markets and the domestic sectors pushed the Danish economy toward full employment. Export gains were augmented by price gains, particularly in the agricultural sector, due largely to Danish entry into the EC. However, the deficit in the trade balance, which was $430 million in 1972, continued to be high in 1973. Preliminary indications are that the deficit could be at least $650 million in 1974.

However, the scarcity and high price of imported fuels, which began late in 1973 and continued in 1974, slowed growth, increased already climbing prices, and gave rise to expectations that a serious balance of payments deficit and general downturn in the economy will occur in 1974.

The sharp 9.6-percent rise in the consumer price index to 177.6 (1963=100) in 1973 was due to both higher import prices and wage increases. The consumer price index is expected to advance further in 1974, largely reflecting the effects of rising fuel prices on the economy. In an effort to moderate the rise, the Government imposed a price and profit freeze from January 8 to February 28, 1974.

Directly reflecting cutbacks in fuel allocation, overall economic growth is expected to decline sharply in 1974, while unemployment will rise. In addition to direct fuel cutbacks, production levels are likely to be affected by shipping problems caused by delays in imports for the processing industries.

—By Marshall H. Cohen, ERS

France

France continued to display one of the healthiest economies in Western Europe during 1973.

Economic productivity was exceptional with real growth estimated at 6.3 percent in 1973, compared with 5.4 in 1972.

France's trade surplus in 1973 is estimated at $1.4 billion compared with a $1.3 billion surplus in 1972 on an f.o.b. basis.

The possibility of a 1974 trade surplus appears clouded by the energy crisis. Government estimates of a $1.7 billion surplus could be reduced considerably by rocketing oil prices. France imports 75 percent of its oil from the Middle East.

Inflation continues to be France's No. 1 economic problem owing in part to a policy of expanded growth at the expense of price stability. While Government officials feel inflation in 1974 will slightly exceed 1973's 6.9 percent rate, indications now are that this will be difficult to achieve with the hike in oil prices. Some observers have predicted inflation will be as high as 12 percent in 1974. The consumer price index rose 8.5 percent and industrial wages 13.9 percent in 1973.

Energy problems appear less damaging overall in France than elsewhere in Western Europe. Bilateral agreements with Saudi Arabia seem to assure the French of a continued pipeline to the Middle East.

Higher prices for petroleum in other West European countries, such as Germany and the United Kingdom, could indirectly reduce imports of French goods and seriously affect export-related industries, particularly the chemical and automobile manufacturing sectors.

Real growth has been set at 4.2 percent for 1974. Labor union demands for wage increases could lower this estimate if strikes develop. To avert a widespread economic slowdown, a primary goal of the Government is to maintain full employment.

—By Lorin O. Lovfald, ERS

Italy: Corn harvest.

Italy

The hopes in late summer of 1973 for a continued economic recovery after a 3-year period of near stagnation were dim by the year's end. Government anti-inflationary measures adopted last summer nearly collapsed in February 1974, when the Government authorized the third gasoline price hike in 5 months and increased prices of many essential foodstuffs, including pasta, meats in casing, sugar, cheese, butter, and olive oil. Prices increased by 11 percent in 1972 and 12-15 percent in 1973.

The economy in 1974 will be stagnant at best. The country's major industries, with Fiat in the lead, plan to start big layoffs of workers in the spring. Sharp losses in sales have been forecast.

Gigantic increases in petroleum export prices by the six Persian Gulf states—on which Italy depends for more than 90 percent of its energy supplies—dealt a severe blow to the economy. Italian spending for imported petroleum

and gas is expected to have reached $4 billion in 1973. Italy imported 130 million tons of crude oil last year; the same volume of imports this year at $98.50 per ton would approach a cost of $13 billion.

The balance of payments for 1973 would have been heavily deficit except for the large foreign borrowing. The balance of trade went sharply into deficit. The January-November trade deficit was $4.7 billion, compared with $581 million surplus a year earlier. Italy reportedly borrowed as much as $5 billion abroad in 1973 to shore up official reserves at the Banca d'Italia. The lira has already weakened considerably against the dollar. The lira as of January 1 was 660 per U.S. dollar, compared with 582 a year earlier, and it has continued to weaken progressively since January. Prospects for the Italian currency are dimmed by talk of a 1973 deficit in the balance of payments of between $5 billion and $10 billion.

Government concern about the inflationary effects of budgetary cash deficits in 1974 is compounded by possible large tax losses from a slowdown in the economy—$1 billion alone from tax revenues from possible gas rationing. The budgetary cash deficit for 1974 is now estimated at $1.4 billion, or 20 percent above last year.

The situation in agriculture is also critical, particularly in the grain and livestock sectors. During January-November 1973, the agricultural trade deficit amounted to $4.5 billion, 60 percent above the comparable period in 1972. Feed production is far short of consumption. The feed deficit for 1972 approached $700 million, and for 1973 it is expected to have greatly exceeded $1 billion.

The imbalance between production and consumption is even more drastic for meat, particularly beef and veal. After passing $2 billion in 1973, imports of cattle and beef in 1974 would have exceeded $3 billion if it were not for the recent ban on imports. The total meat import deficit for 1974 was expected to exceed $4 billion until the recent restriction on beef imports. Despite recent restrictions on beef imports, the agricultural trade deficit for 1974 is still expected to greatly exceed $4 billion.

Despite these pessimistic views, chances are that Italy's imports of feeds —which comprise the bulk of U.S. agricultural exports to Italy—will go up. The ban on beef imports has aroused interest in crash programs to boost livestock production.

—By James Lopes, ERS

The Netherlands: Glasshouse lettuce.

Netherlands

Real economic growth in the Netherlands continued to expand in 1973 at a moderate 5 percent rate. This compares with 3.7 percent in 1972. Expanded exports, up 14 percent in volume for the year, are felt to be the main factor in the increased growth rate.

The Dutch have maintained a trade surplus throughout the year despite the 5-percent guilder revaluation in mid-September. This surplus is estimated at 807 million guilders for 1973, compared with a 364 million guilder deficit in 1972. The revaluation was triggered in part by the huge 5-billion guilder balance of payments surplus for fiscal 1973.

Aside from immediate energy concerns, inflation is the major problem facing the Netherlands in 1974, although the 10.3-percent inflation rate during 1973 is a slight improvement over 1972's 11.5 percent. Consumer prices last year rose 8.2 percent, compared with 7.8 percent in 1972, while wages gained 13.7 and 12.3 percent respectively for the like periods.

The Netherlands economic wellbeing for 1974 rides heavily on developments in the energy sector. Although some sources claim the Arab oil embargo against the Netherlands has not been totally successful, the economy has already been affected significantly.

Latest forecasts predict no real growth in GNP in 1974, compared with earlier estimates of 4.5 percent. The cost of living is expected to rise by 10.7 percent, with unemployment at a possible 170,000 instead of the 105,000 predicted earlier. Trade forecasts call for a drop of 5 percent in imports and 3 percent in exports compared with last year.

—By Lorin O. Lovfald, ERS

Canada

Canadians are generally confident that their economy and agricultural sector will not be severely disrupted as a result of world energy shortages. But there is some concern that the possible deterioration of economic conditions in the United States and the rest of the world may slow down Canada's exports and real rate of growth in 1974.

Some dislocation of fuel supplies may occur in the eastern Provinces, which depend on imports. Most of Canada's petroleum imports are from Latin America. The higher cost of petroleum imports will be partly offset by higher taxes on exports of petroleum to the United States—$6.40 per barrel effective February 1974, up from 40 cents in October 1973, when the tax was first imposed.

Before the start of the energy shortage, real economic growth for 1974 had been forecast at about 5 to 5.5 percent, compared with an estimated 7 percent for 1973. Now, most non-Government economists have trimmed estimates of real growth for 1974 to as low as 3.5 percent. Real economic growth started to slow in the spring of 1973, from an unsustainable rate of over 11 percent in the fall and winter of 1972-73. It came to a virtual standstill in the fall of 1973, due largely to labor disputes and transportation strikes. Economic activity has picked up since then, and real growth during 1973 was higher than in 1972.

A recession is not excluded, but not generally anticipated. Predictions of an economic growth rate of about 5 percent are based primarily on a Govern-

ment survey of Canadian companies' investment intentions in 1974. The survey points to a 20 percent increase in overall investment, with an increase of nearly 47 percent in manufacturing alone.

On the negative side, inflation, which has been moving at about the same pace as in the United States, will not abate. The unemployment rate is expected to continue at the 5-6 percent level of the past 2 years or so.

—By OMERO SABATINI, ERS

Japan: Chopping grass for forage.

Japan

Japanese industry depends on oil for about two-thirds of its energy supply —compared to one-sixth in the United States—and Japan must import all of its crude oil. Arab countries have supplied 40 percent of this in recent years.

In November 1973, the Arabs reduced their shipments to Japan by 25 percent from the previous month and maintained this level through December. In January, shipments were increased 10 percent (two-thirds of September's level) as a result of the Arab decision, announced on December 25, to dub Japan a "friendly" nation. It is anticipated that total oil imports in 1974 will be equal to or slightly greater (up to 4 percent) than in 1973, when 280 million kiloliters were imported.

Energy consumption controls have been in effect since January of this year. A 15-percent reduction from the same month in 1973 was voluntary in January and mandatory for most industries in February. Urea production was a notable exception.

The major impact of curtailed energy supplies on Japanese agriculture has been to raise the cost of transporting fresh produce to urban markets. Also, shipping turnaround time between the U.S. gulf ports and Japan has in some cases increased by about 50 percent.

The yen weakened in November 1973, but recovered somewhat by March of this year. The Bank of Japan's intervention rate was around 265 yen per dollar after the February 1973 dollar devaluation. In November the rate drifted to 270 and was as high as 300 in January. By March it appeared the new intervention rate was 285, only a 2-percent depreciation from the average trade-weighted rate for 1973 of 280 yen per dollar.

Real GNP growth in 1973 was 11 percent, typical of growth rates achieved in Japan in the last decade. It is possible that real growth in 1974, however, will fall to only 5 percent due to the energy constraint on the economy.

Inflation has become a problem in Japan, which, despite its heavy involvement in international trade, has enjoyed relatively stable wholesale prices since the Korean War. But wholesale prices shot up 15.9 percent in 1973, compared to an average annual increase of only 0.7 percent from 1951 through 1972. Retail prices also soared in 1973, increasing, on the average, 11.7 percent, compared with 4.5 percent in 1972.

The rise in the price level in 1973 was due primarily to "protective" or "pre-emptive" price increases by Japanese industry late in 1973 because of the anticipated, but not entirely realized, impact of reduced energy supplies.

—By BRUCE L. GREENSHIELDS, ERS

Belgium

The Belgian economy in 1973 experienced an acceleration of the upswing which began in late 1972. For the first three quarters of 1973, exports increased 21 percent, private domestic business investment increased 17 percent, and public sector consumption climbed 21 percent over last year. Demand for capital goods has strengthened, and utilization of industrial capacity through October attained a high level.

Inflation and unemployment were the major economic problems in 1973. Although the inflation rate, at approximately 7 percent, was one of the lower rates in Europe it seems quite severe to a country accustomed to a low inflation rate.

During 1973 three anti-inflation measures were introduced. First, the agreement made by the banks in July 1972 to freeze 25 percent of their convertible franc deposits at the National Bank was extended through the end of September 1973. The sum to be deposited was raised, and the agreement was altered to include other financial institutions.

Second, the discount rate was increased to 7 percent in October. Third, consumer credit was restricted.

Unemployment has risen at a slow and steady rate, especially among young people and women, despite a simultaneous increase in job openings. Apparently the jobs being generated are not satisfying the training and tastes of the young people.

Thus far Belgian agricultural trade has not been greatly affected by the oil crisis. In most areas, the situation has been normal. However, there have been some problems with transporting imported raw goods from ports to manufacturing plants within Belgium.

Real growth in 1973 was about 6 percent. With the energy crisis and its probable diverse effect on domestic and foreign demand, the picture for

Belgium: Seedbed preparation.

1974 is less favorable. The hike in petroleum prices could increase Belgium's fuel import bill by close to $2 billion. However, Belgium's foreign exchange reserve position is relatively strong—$5 billion as of November 30, 1973.

—By CYNTHIA BREITENLOHNER, ERS

Switzerland: Cheese-making

Switzerland

Real economic growth dipped slightly in Switzerland during 1973—4.3 percent, compared with 4.7 percent in 1972. The downturn was due largely to the Government's tight credit policies, enacted to curb inflation. Current policies may be modified to counteract the impact of the oil crisis. Earlier Government forecasts of 3 percent real growth and 5 percent inflation have given way to more pessimistic estimates of 2 and 10 percent, respectively, in 1974.

Inflation in Switzerland is fueled in part by a labor shortage. One-third of its labor force is imported, its effective unemployment rate is zero, and wage demands in the neighborhood of 11-12 percent are forecast for 1974, compared with 9 percent in 1973.

Unlike many other countries where food prices in 1973 exceeded overall consumer price rises, the Swiss have been able to keep the lid on. The food price index through November rose only 5.7 percent—lowest in Western Europe—compared with the general consumer price rise of 11.9 percent.

Despite a substantial revaluation of the Swiss franc—it floated upward in 1973 by an average 20 percent compared with other world currencies—the 1973 trade position has improved. Export volumes are estimated up 14 percent, compared with 10.9 in 1972, while imports for the like period grew 12 and 9.2 percent, respectively.

Switzerland's perennial balance of trade deficit will likely worsen in 1974 if the forecast economic downturn materializes, coupled with the higher import price of oil. The cost of Switzerland's petroleum imports, given the price hikes of the past year, are expected to rise by about $700 million in 1974. However, Switzerland has very large gold and foreign exchange reserves, which stood at $8 billion at the end of 1973.

—By LORIN O. LOVFALD, ERS

South Korea

New investments and tourism from Japan gave South Korea's rapidly growing economy an extra zip in 1973. Many new factories expanded the country's output of manufactured products—many for export markets—last year. Real value added by manufacturing to the GNP rose 31.4 percent in 1973.

In real terms, preliminary 1973 estimates show the following percentage gains over 1972: GNP, 16.9; GNP per capita, 15; agriculture and other primary industries, 5.3; gross fixed investment, 32.3; national savings, 59.5; and consumption, 9 percent. Policies favorable to foreign investments and the high productivity of Korea's relatively young labor force have contributed to an industrial boom.

Inflation in other countries has probably contributed to greater purchases of Korean textiles, footwear, plywood, and various light manufactures. Korean products usually compare well in quality in international markets, but prices are often considerably lower than those for the same items from Europe or North America. This has contributed to a blossoming trade between South Korea and Mideast nations.

Korean imports of crude petroleum from Saudi Arabia and Iran are expected to continue in 1974 at the peak levels recorded in 1973. New refineries are under construction with the help of foreign financial and technical assistance. A large petrochemical complex near Pusan is expected to provide additional bunkering fuel for ships carrying products to Japan.

South Korea's total exports jumped about 92 percent in 1973 to about $3.21 billion, while imports increased about 73 percent to $3.89 billion. The trade deficit increased 18 percent to $680 million, but rising foreign investments and service payments enabled foreign exchange reserves to rise.

U.S. agricultural exports to South Korea increased from $363.5 million in 1972 to about $635 million in 1973. Much higher prices for wheat, rice, and cotton contributed to the increase. Korea will need more U.S. wheat, corn, cotton, and soybeans in 1974.

Deliveries of U.S. rice to Korean ports are expected to fall sharply in 1974, but shipments of barley could be about ten times the 1972 level. Barley use as a substitute for rice has gained as world rice prices increased.

The variety of farm products sent to Korea by U.S. exporters continues to grow. U.S. agricultural exports to South Korea in 1974 should range between $775 and $800 million.

Korea's GNP reached a record $12.4 billion in 1973 and should increase by at least 10 percent in 1974, even if energy problems hamper exports.

South Korea's foreign exchange reserves increased about 40 percent in 1973 and approximated $1 billion in late December. Larger exports of ships and heavy industry items to petroleum-exporting countries should help pay part of the estimated $700-million increase in the fuel import bill. Sharply higher prices for crude petroleum and grain imports are expected to reduce foreign exchange holdings in 1974.

—By JOHN B. PARKER, ERS

Taiwan

Taiwan continued to show very impressive economic growth during 1973. Total exports were $4.5 billion during 1973, while total imports were $3.8 billion, leaving a favorable balance of trade of $700 million.

Taiwan's GNP was expected to rise to about $9 billion in 1973 compared to $7.2 billion in 1972, with annual growth

at 12.3 percent. Because of much higher oil prices and worldwide inflation, Taiwan's economic growth in 1974 may slow to about 7 percent. Arrangements recently concluded with Saudi Arabia should assure Taiwan of adequate imports of crude oil in 1974. Technicians from Taiwan will build an oil refinery in Saudi Arabia.

Despite strict anti-inflation measures, Taiwan experienced heavy inflationary pressure during 1973. The inflation rate increased to 12 percent in 1973 from less than 8 percent in 1972 and is expected to rise to more than 12 percent during 1974.

Taiwan has taken many actions to contain inflation including reducing import duties on many agricultural and nonagricultural commodities. The consumer price index rose to an estimated 132, industrial wages to 155, and the food index was estimated at 148 in 1973 (1965=100).

The energy shortage has adversely affected synthetic textile production. To compensate for falling synthetic fiber production, the Board of Foreign Trade has now projected 1974 cotton imports at 1.3 million bales, 10 percent above estimates before the energy crunch. To relieve energy shortages, the Government plans to curtail consumer and nonessential use while making every effort to assure adequate supplies for industry.

Taiwan hopes to maintain its strong position in foreign exchange reserves by further increasing exports to the United States and the Far East.

U.S. agricultural exports to Taiwan in 1973 were more than double the $193 million recorded in 1972. Because of further gains in U.S. exports of grain, cotton, and soybeans to Taiwan, value should reach $500 million in 1974. —By AMJAD H. GILL, ERS

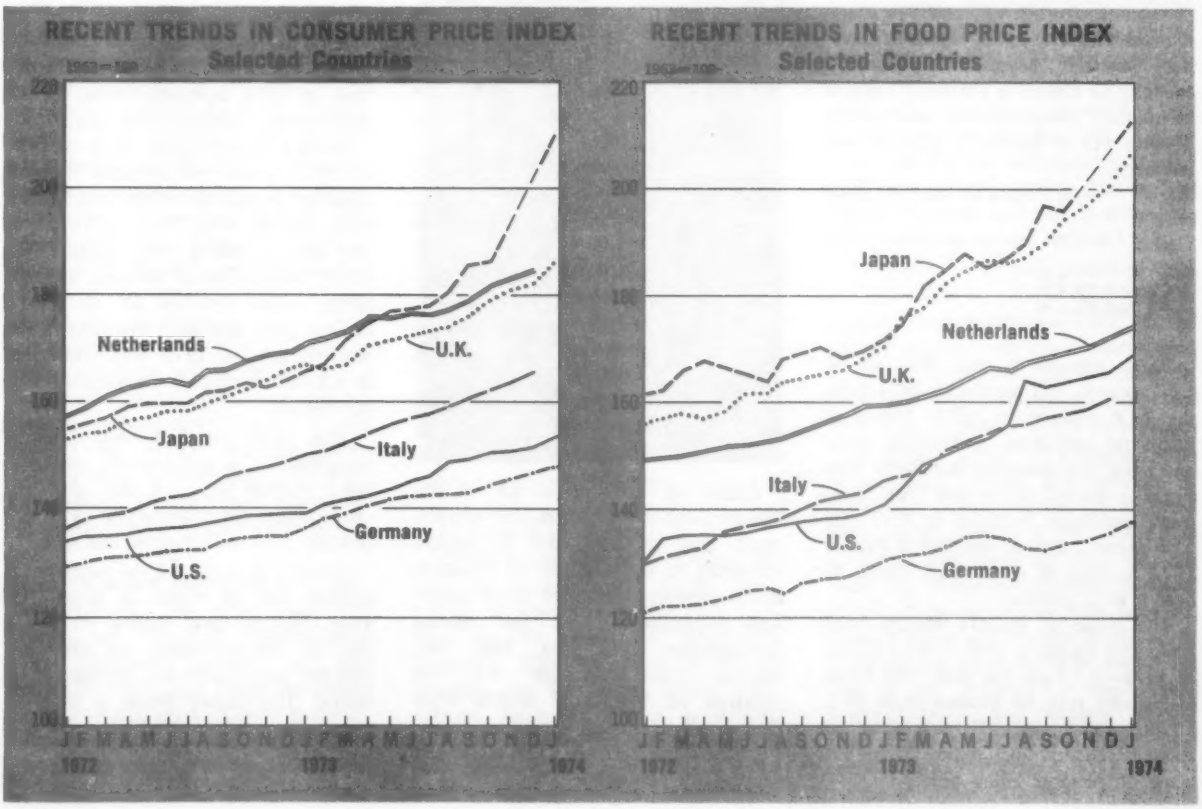
Venezuela

Increased petroleum production—5 percent over 1972—and a sharp rise in prices accounted for nearly half of the estimated 21 percent growth in GNP in 1973. Significantly the nonpetroleum sectors of the economy continued growing at the relatively high annual rate of about 8 percent in 1973—about the same as in 1972. Improvement of the terms of trade resulted in a marked expansion in real national income of over 12 percent.

The booming economy, together with rising costs of imports and shortfalls in production of several basic agricultural crops, boosted consumer prices about 6 percent in 1973. More moderate increases of about 3 percent occurred in 1971 and 1972.

Agriculture is more important than suggested by the 7-percent share of real GNP. It supplies about 90 percent of domestic requirements of food and fiber and provides employment for about one-fifth of the country's labor force. Adverse weather in 1972 and again in 1973 resulted in reduced production of rice, corn, and sesame. Overall agricultural growth was held to about 3 percent, slightly less than population growth of 3.3 percent. Lower crop production was offset by increased output of livestock products, where growth has been about 7 percent annually during the past 2 years.

Government programs to encourage agricultural production include price



supports; subsidies; public investment in irrigation, roads, housing, and electrification; agrarian reform; and agricultural credit. Despite these efforts overall agricultural growth has lagged behind expectations for a number of years.

Considerable progress has been made in import substitution of such items as milk, poultry products, pork, rice, and sugar. Additional progress would result from increased efficiency, further progress in import substitution, and in increasing exports of sugar, coffee, and cacao.

The implementation of a new ad valorem tariff system in 1973 to supplant the old system of quotas, licenses, and other quantitative restrictions, should encourage greater efficiency in agriculture and manufacturing and a higher level of trade. Also, during 1973, Venezuela joined the Andean Common Market. This, together with other incentives to expand trade, should stimulate the competitiveness of Venezuelan producers.

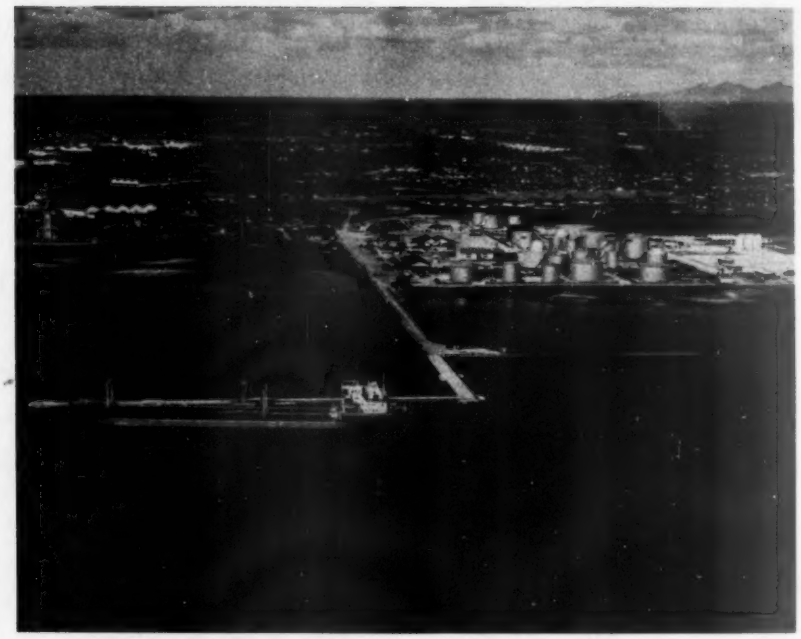
If petroleum production is maintained at the 1973 level, the value of petroleum exports may range from $8-$10 billion in 1974, compared with about $2 billion in 1973. Increased petroleum earnings will result in a significant increase in Government revenue, probably beyond the country's capacity to absorb it efficiently. Severe inflationary pressures exist and greater imports will be needed to partially offset them.

—By FRANK D. BARLOW, ERS

Brazil

Brazil expects to curb the rate of GNP growth to 7 percent in 1974 from the 11.4 percent in 1973. Increased prices for petroleum derivatives, food, and basic raw materials are likely. The Brazilan export drive may face contracted markets. Inflation in 1973 was 15.5 percent, almost identical to that of 1972 in spite of determined efforts to hold it to 12 percent.

The value of Brazil's exports rose from $3.9 billion in 1972 to $6.1 billion in 1973—a 53 percent gain. The value of imports rose 39 percent from $4.2 billion to $5.9 billion. Foreign exchange reserves reached $6.1 billion partly because of the large inflow of capital.



Brazil: Oil storage at Paranagua, above. Pumping irrigation water, left.

Brazil will be able to get all the energy needed but petroleum imports could cost an additional $2 billion according to the Minister of Finance. Brazil produces one-third of its petrolem requirements and has special arrangements with Iran, Iraq, and Algeria, which probably will not embargo oil exports to Brazil, since they want to import Brazilian sugar. Venezuela and Peru are Latin American suppliers of petroleum.

Wheat imports from the United States—most important item in U.S.-Brazil farm trade—could plunge sharply in 1974. Estimates suggest that the volume of wheat imported from the United States could be only 800,000 tons in 1974, compared with the 1.7 million tons imported last year.

Brazil's wheat import needs rocketed in 1973 when the domestic harvest, expected to total 2 million tons, yielded only 680,000 tons. Further, Argentina was able to deliver only 926,000 tons under the traditional bilateral arrangement, which provides for up to 1.2 million tons annually. Brazilian wheat consumption in 1973 was authorized at 3.5 million tons by the domestic supply agency.

This year, the authorized level of consumption is considerably higher—4-4.2 million tons. Of this, domestic crops, harvested in December 1973, will provide 1.85 million tons, less seed.

Canada is expected to supply 1.3 million tons of wheat to Brazil this year. Traders now believe Argentina will be able to supply an additional 400,000 tons under the traditional bilateral. The United States is likely to supply the residual 800,000 to 1.1 million tons.

—By SAMUEL O. RUFF, ERS

oil: paying the price

High-Cost Oil Puts Monetary Squeeze on U.S. Markets

By SPENCER F. ENGLAND
Foreign Demand and Competition Division
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Balance-of-payments problems caused by the 170 percent rise in petroleum prices probably will not cause most developed countries to restrict imports of U.S. farm products this year. But a small number of U.S. farm markets—a few developed countries and many developing nations—will be hard pressed to maintain currency reserves, and could initiate measures to restrict farm imports.

Considered according to their ability to cope with higher oil prices, one group of countries—Australia, Austria, Canada, West Germany, the Netherlands, Spain, and Switzerland—are unlikely to restrict imports. This group, which took 23.5 percent of U.S. farm exports last year, should be able to handle all of the adjustment by drawing down reserves. Probably they will also rely on capital inflows.

A second group will find it difficult to handle all of the adjustment burden in these ways. Nevertheless, they are unlikely to impose direct import restrictions. These include Belgium-Luxembourg, France, Ireland, Japan, Norway, and Sweden. Reserves and capital inflows will handle much of the adjustment.

To the extent they choose to constrain imports, they most likely will depend on currency depreciations, slower economic growth, or high prices. In 1973, this group accounted for 21.8 percent of U.S. farm exports.

Countries in a third group, consisting of Denmark, Finland, Italy, and the United Kingdom, face difficult prospects. Here, pressures are strong for governments to take measures to directly restrict some types of imports. Whether agricultural imports will be limited, however, depends on as-yet unknown factors. Last year, these countries accounted for only 8.4 percent of U.S. farm exports.

The Communist countries are essentially self-sufficient in petroleum, so that petroleum price increases should have little impact on their trade.

Key factors that governments in these markets will consider before cutting agricultural imports are domestic crop prospects, the inflationary impact of reducing food imports, and projected savings in foreign exchange. Moreover, the probable negative impact of higher oil prices in some markets could be partly offset by a growth in exports to oil-exporting countries.

Because of booming world markets for primary commodities, exports are expanding rapidly in the nonoil-producing, less developed countries (LDC's).

With the increased foreign exchange earnings by these countries, nonpetroleum imports were expected to expand from about $60 billion in 1972 to an estimated $85 billion in 1974. Now, with the downturn in business cycles in developed countries and the up to $10 billion increase in LDC's petroleum import bill, this expansion is unlikely to be realized. Actually, nonpetroleum imports may be no higher than the 1972 levels. In 1973, U.S. agricultural exports to the LDC's and a few other exporters of primary products amounted to $5.5 billion, or 31.4 percent of U.S. exports.

Increased earnings by countries who are members of the Organization of Petroleum Exporting Countries (OPEC) offer some opportunities for expanded exports. These countries accounted for only 4 percent of U.S. agricultural exports last year, so that even a large percentage increase in imports would have a small impact on total U.S. agricultural exports.

OPEC countries can be divided into two categories. Saudi Arabia, Iraq, Libya, and the other Persian Gulf countries can be called low absorbative countries. These countries are already wealthy, and the sudden influx of additional foreign exchange is unlikely to cause a sharp rise in imports. In 1973, they accounted for only 0.7 percent of U.S. agricultural exports.

Algeria, Ecuador, Indonesia, Iran, and Nigeria are high absorbative countries. With their large, poor populations, the sudden removal of foreign exchange constraints on imports could generate an import boom. In 1972 their total imports were $7.4 billion and in 1974 their earnings will be between $20 and $30 billion. Because of time lags and other problems their ability to increase imports in 1974 is limited. They accounted for 2.5 percent of U.S. agricultural exports in 1973.

Venezuela is a borderline case. For industrial products, it is a high absorbative country. Since its population is already fairly well fed and the Government wants to protect the domestic agricultural sector, a massive increase in agricultural imports seems unlikely. Some increase in agricultural imports is likely, however, as an anti-inflationary measure.

Petroleum price increases mean that developed countries will pay the OPEC countries an estimated $40-$60 billion more for petroleum imports in 1974. This sum is equivalent to about 10 percent of world trade in 1973 or 2 percent of the developed countries' combined 1973 gross national products.

Before the petroleum price increase, the only developed countries expected to have substantial 1974 balance-of-payments problems were the United Kingdom and Italy. Now, however, every country except possibly the United States and Canada will experience large trade and current account deficits (the current account includes imports, exports, remittances, and services).

Normally, developed countries' deficits are offset by others' surpluses. As a group, they maintain a small current account surplus with the less-developed and Communist countries. However, in 1974 developed countries probably will have large current account deficits.

By simply adding the additional cost of petroleum imports to projections of the current account before the oil price rises, the magnitude of the problem is indicated. This does not take into account any of the secondary or feedback effects of the petroleum price increase. Thus, it is not a projection of the likely situation, but rather an indicator of the size of the problem. It shows that Japan, Oceania, and Western Europe must adjust to a $40-$50 billion current account deficit.

The ability of individual countries to

cope with the problem varies widely. On strictly a balance-of-payments basis, there are hypothetically four ways a country can adjust to the problem. It can draw down reserves, cut imports, expand exports, or borrow abroad—broadly speaking, the last includes attracting foreign investment.

The developed countries' ability to finance higher petroleum prices could also be judged by their level of free reserves—reserves above that needed to cover 3 months' imports.

Three groups are apparent. Group One countries' free reserves exceed their projected current account deficit. In Group Two countries, free reserves are smaller than the deficit, but their total reserves are greater. Group Three countries' deficits are greater than total reserves.

The share of reserves required to finance higher cost petroleum varies from 8 percent for Australia to 200 percent for Finland. Obviously Italy, the United Kingdom, Denmark, and Finland cannot draw down over 100 percent of their reserves. Moreover, there is also a practical limit as to how far any country can reduce its reserves.

Free reserves are greater than the projected deficit for six countries. They are Germany, Australia, Austria, Switzerland, Spain, and Ireland. In principle, these countries could completely cover their 1974 petroleum imports by drawing down reserves. The remaining countries could use a portion of their reserves to cover some of the deficit, but they will also have to make some other adjustments.

A country's reserves generally reflect its overall balance-of-payments strength. However, under any categorization scheme there are exceptions or borderline cases. Free reserves in Canada and the Netherlands, for example, are smaller than their projected deficits, but they are placed in Group One because of the small trade adjustment they would have to make and their attractiveness to foreign investors.

Nearly all governments would prefer to make the adjustments by expanding exports. The export expansion required to cover the projected deficit would vary from 4 percent for Canada to 34 percent for Finland, assuming imports are constant at 1973 levels. As with reserves, the size of the required adjustment falls into three general categories. Belgium-Luxembourg, Canada, Germany, the Netherlands, Sweden, and Switzerland require adjustments of under 10 percent. Finland and Japan would have to expand exports by over 30 percent, and other countries would need 20-30 percent changes.

The real danger in today's world is that every country may try to restrict imports. In such a case every country could not expand exports, so a cut in imports will be necessary to cover current account deficits. Since imports and exports are nearly in balance for most countries, the percentage cut in nonpetroleum imports needed to cover the deficit is quite similar to that for exports—ranging from 4 percent for Canada to 38 percent for Japan.

Spain is about the only country that has a substantial difference—20 percent for exports and 11 percent for imports. This reflects Spain's traditional trade deficit, which normally is covered largely by tourism. Because tourism is expected to be particularly hard hit in 1974, Spain's foreign exchange earnings probably will be cut substantially.

On January 29, the U.S. Government removed all controls on capital exports. Several other countries followed by dismantling barriers to capital inflows. These moves are designed to facilitate an outflow of U.S. capital and thereby prevent further appreciation of the value of the U.S. dollar.

UNITED STATES: 1973 FARM EXPORTS BY MARKET

Destination[1]	Value	Share
	Bil. dol	*Percent*
Developed countries	9.5	53.6
Group I	4.1	23.5
Group II	3.8	21.8
Group III	1.5	8.4
Communist countries	1.9	10.9
OPEC	0.7	4.0
Others (mostly LDC's)	5.5	31.4
Total[2]	17.7	100.0

[1] Markets grouped by ability to cope with higher oil prices. [2] Totals and subtotals do not equal because of rounding.

An outflow of U.S. capital will also facilitate other countries' ability to cope with higher petroleum prices through their capital accounts, and thus reduce the possibility that they will have to cut imports. By halting or reversing the recent appreciation of the dollar, U.S. exporters will regain the competitive edge held in 1973. Results of the policy action will aid in maintaining U.S. exports.

In late January, the United States also increased its swap arrangements to $18 billion. A swap is a line of credit that foreign central banks can draw upon to defend their currencies and balance-of-payments. It serves the same role as reserves.

DEVELOPED COUNTRIES: INDICATED 1974 CURRENT ACCOUNT DEFICITS, ESTIMATED 1973 EXPORTS, NONPETROLEUM IMPORTS, AND RESERVES
[In billion dollars]

Country	Indicated 1974 current account deficit	Reserves end 1973	Estimated 1973 exports	Estimated 1973 nonpetroleum imports
Group I				
Australia	0.5	6.1	9.5	7.0
Austria	1.0	2.8	5.0	6.5
Canada	1.0	5.7	25.0	24.0
Germany	6.0	34.1	65.0	50.0
Netherlands	1.2	6.5	24.0	22.0
Spain	1.0	6.7	5.0	9.0
Switzerland	.6	8.1	9.5	11.5
Group II				
Belgium-Luxembourg	1.5	5.1	22.0	20.0
France	6.8	8.5	38.0	36.0
Ireland	.4	1.0	2.0	2.5
Japan	11.5	12.2	37.0	30.0
Norway	1.2	1.6	4.5	6.0
Sweden	.7	2.5	11.5	10.0
Group III				
Denmark	1.6	1.3	6.0	7.0
Finland	1.2	.6	3.5	3.5
Italy	6.4	6.4	22.0	25.0
United Kingdom	8.0	6.5	32.0	35.0

CROPS AND MARKETS

GRAINS, FEEDS, PULSES, AND SEEDS

USSR Reports Winter Grain In Satisfactory Condition

Soviet winter grain is in generally satisfactory condition, according to reports in national Soviet newspapers on March 23 and 24, 1974. A previous report on March 14 stated that winter losses exceeded 10 percent in parts of the Baltics and the central Black Soil and non-Black Soil Zones, but the overwhelming majority of stands were in satisfactory or good condition. Indications are that overall crop losses from winterkill probably were about normal, but Soviet press comments on this point were not entirely conclusive. This could mean that the amount of winterkill is higher than the below-average losses of last year.

Some crop damages and difficulties encountered this winter in several important winter grain areas included: Dust storms in parts of the north Caucasus and south Ukraine; excessive water from melting snow in the lowlands of the Baltics; persistent ice crust formation in the west central part of the Black Soil Zone, the east Ukraine, and in a number of rayons (counties) in Beyelorussia; and smothering because of very heavy snow cover in the northeastern part of European USSR.

A warming trend and rain in mid-March over large segments of the winter grain regions did, however, accelerate crop development and replenish soil moisture reserves considerably—most notably in the Baltics, Byelorussia, the Ukraine, north Caucasus, central Black Soil and non-Black Soil Zones, and in the Volga region. However, below-average precipitation was noted for some areas, including the western part of European USSR and around Krasnodar in the north Caucasus. Top-dressing of winter grains is being carried out on a wide front and as of March 23-24 had been completed on more than 27 million acres, about 2.5 million acres more than on the corresponding dates last year.

Because of the favorable mid-March conditions, spring field operations in most southern areas of the USSR started earlier than usual—in some areas 4-6 days earlier and in others as much as 10-15 days earlier.

India's Wheat Crop Lower, Import Needs Rise

Estimates of India's wheat production have now been lowered to 23 million tons, 7 million tons below the Government's target. This would make it the smallest wheat crop since 1970. With harvesting soon to get underway, Government decisions on procurement policy and prices are imminent.

Anticipating a tight supply situation, the Government is reportedly looking for 4-5 million tons of grain from abroad. Unconfirmed reports indicate they are considering contracting for about a million tons of wheat from Canada on soft terms; are looking to Russia for more wheat; and are also inquiring about possible purchases of U.S. milo.

Meanwhile, the Indian Government has eliminated restrictions on interstate movement of coarse grains, enabling private traders as well as Government Agencies to move supplies into deficit areas.

Grain Production No. 1 Priority in Soviet Plan

In discussing the Soviet Union's 1974 grain production plan of 205.6 million tons, TASS, the Soviet News Agency, indicated that the production of grain remains the country's No. 1 priority in agriculture. More grain is needed to increase Soviet output of livestock products and for export, especially to Socialist countries.

A crop of 205.6 million tons would be the second largest in Soviet history. Plans call for the general growth in production to come as a result of improved yields, primarily due to increased fertilizer application. In 1974, grain crops in the USSR are to receive more than twice the amount of fertilizer used in 1970.

Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

Item	April 2	Change from previous week	A year ago
	Dol. per bu.	*Cents per bu.*	*Dol. per bu.*
Wheat:			
Canadian No. 1 CWRS-13.5	5.66	—113	3.10
USSR SKS-14	(1)	(1)	(1)
Australian FAQ[2]	(1)	(1)	(1)
U.S. No. 2 Dark Northern Spring:			
14 percent	5.09	— 63	2.75
15 percent	(1)	(1)	2.79
U.S. No. 2 Hard Winter:			
12 percent	5.00	— 78	2.77
No. 3 Hard Amber Durum	7.13	— 65	2.86
Argentine	(1)	(1)	(1)
U.S. No. 2 Soft Red Winter	(1)	(1)	(1)
Feedgrains:			
U.S. No. 3 Yellow corn	3.60	— 3	2.00
Argentine Plate corn	3.90	— 1	2.18
U.S. No. 2 sorghum	3.46	— 2	2.05
Argentine-Granifero sorghum	3.40	0	2.03
U.S. No. 3 Feed barley	3.15	— 1	1.68
Soybeans:			
U.S. No. 2 Yellow	7.01	— 24	6.26
EC import levies:			
Wheat[3]	[4] 0	0	1.66
Corn[5]	[4] 0	0	1.21
Sorghum[5]	[4] 0	0	1.17

[1] Not quoted. [2] Basis c.i.f. Tilbury, England. [3] Durum has a separate levy. [4] Levies applying in original six EC member countries. Levies in UK, Denmark, and Ireland are adjusted according to transitional arrangements. [5] Italian levies are 19 cents a bushel lower than those of other EC countries.

NOTE: Price basis 30 to 60-day delivery.

Argentina Active in Coarse Grain Market

By the end of the first week in March, Argentina sales of new-crop coarse grains amounted to 3.9 million tons, nearly half of Argentina's exportable supply. Much of this trade, especially in corn, was contracted for April-June shipment, and most of the remainder for delivery in the July-September quarter. Both delivery periods are prior to main U.S. corn and sorghum harvests.

Philippines Buys U.S. Corn

The Philippines recently purchased 100,000 metric tons of U.S. corn amid indications of another 100,000-ton purchase in the near future. With the short corn crop in 1972-73, and the subsequent stock drawdown, the Philippine Government apparently wants to rebuild its stock position to previous levels. This would assure the Philippines of adequate grain availability during the expected period of short rice supply this July-September. The Government prefers to improve corn stocks rather than rice because of its greater availability at favorable prices.

LIVESTOCK AND MEAT PRODUCTS

Synthetics, Lower Demand Cut U.S. Hide Prices

Increased use of synthetic leather substitutes has caused a weakening of consumer demand and lower prices for U.S. cattle hides.

In 1972, the United States exported 17.6 million hides, compared with 16.9 million in 1973, and demand in the export market is reportedly weak at the present time.

U.S. heavy native steer hides peaked at 45 to 46 cents per pound at the beginning of November 1972 and again at the beginning of August 1973. Since the 1973 date, prices have continued their steady decline. By March 15, 1974, they had reached 23¾ to 24 cents per pound, the lowest prices since March 1972.

In addition to the weak domestic consumer demand and reduced exports, cow hide prices were also affected by increased cattle slaughter.

New Zealand Reduces Lamb Export Estimate

New Zealand producers now report greater-than-expected difficulty in filling lamb contracts. Indications are that fewer lambs at lighter weights than expected will be available for the North American market.

Indications now are there will be approximately 1.1 million head available for the North American market, instead of the estimated 1.5 million head originally planned.

Supply Problems Beset Greek Beef Producers

Large supplies of imported beef, along with a record level of domestic beef production, have created problems for the Greek Government and its cattle producers. Consumer resistance to high prices has boosted the supply to high levels. Trade sources indicate there are 50,000-75,000 metric tons of frozen beef and lamb in storage. At the current reduced rate of consumption, this could equal an 8-10-month supply requirement for the entire country.

To counteract the situation, the Government embargoed imports and instituted subsidy programs to aid beef producers. However, both beef and pork producers may suffer substantial losses and future production could decline.

FRUIT, NUTS, AND VEGETABLES

Larger Chilean Canned Fruit Pack

Reports indicating good weather, free prices for canned products, and the return of canning plants to original owners have contributed to a higher 1974 canned fruit pack in Chile.

Production is estimated at 678,000 cases (45 lb. each), 17 percent above the 1973 pack of 580,000 cases. Production of peaches is estimated at 461,000 cases, marmalades 46,000 cases, and other fruits and juices 171,000 cases.

Exports are small, mostly canned peaches to Peru, Bolivia, Cuba, and other Latin American countries.

South Africa Sets Stabilization Subsidy for Deciduous Fruit

Instability of the British pound and increased shipping costs have made South African growers reluctant to ship deciduous fruit under the present procedure of selling fruit for British pounds on a delivered basis. Britain takes over 40 percent of South Africa's fruit exports.

To encourage shipments, the South African Deciduous Fruit Board, with Government support, is undertaking to "stabilize" prices. The "stabilization subsidy" comes into effect if the pound sterling goes below US$2.24, or if freight is higher than that of January 28, 1974.

South Africa's export performance in February was the worst in years.

SUGAR AND TROPICAL PRODUCTS

Philippines Sugar Production May Rise in Coming Years

Production of sugar in the Philippines is likely to increase by about 100,000 tons per year during the next several years. Almost all the gain would come from increased acreage rather than yields. As domestic consumption is already increasing at a rate of 40,000 to 45,000 tons per year, this potential increase would allow additional exports of 55,000 to 60,000 tons.

If mills are operated under optimum conditions, a mill association source has estimated that existing sugar mills could produce 3.2 million short tons of raw sugar per year, compared with a peak actual production in 1972-73 of 2.5 million tons. Nevertheless, it is seldom possible to operate mills at optimum levels so additional ones would be necessary to continue the upward trend in production.

There presently is a mill under construction in the Bicol region which will begin operating some time in 1974. A proposal for five new mills has gained additional support in recent weeks. An investment of $100-$150 million would be required for such construction.

The President of the Philippines recently created the Philippine Sugar Commission and, at the same time, abolished the

Philippines Sugar Institute and the Sugar Quota Administration. The new Commission is being given greatly expanded powers to regulate and control the sugar industry. It is expected the Commission will try to increase production and create a more orderly system for distribution of sugar in the Philippines.

El Salvador's Sugar Output Up

El Salvador's 1973-74 sugar production is up about 25 percent from that of the previous season. The estimate now is for output of 234,000 metric tons. The increases in 1973-74 is due to the cane's recovery from effects of the 1972 drought, better cultivation practices, and a higher extraction rate at mills because of improved technology.

Exports for 1973-74 are expected to amount to about 134,000 tons, which would be equal to exports in 1972 and much above any year prior to 1972.

TOBACCO

EC Tobacco CAP Hurts Greek Burley Sales

Greek burley producers, unsatisfied with the prices offered for their 1973 crop, sold only about 3 percent of that crop during the normal marketing season that ended February 20, 1974. They are asking an average price of about 62 U.S. cents per pound compared with foreign buyer offers of only about 48 cents per pound.

Greece's major burley customers, West Germany, allows duty-free access to Greek burley. But for Italian burley, German buyers not only have duty-free access but in addition, receive from the EC a buyer's premium or subsidy for every pound they buy. This subsidy brings the true cost of reference grade (grade A) Italian burley purchased at the standard price of about 71 cents per pound down to about 37 cents. The true cost of grade B purchased at the standard price of 46 cents, after a subsidy of 34 cents, would be 12 cents. The true cost of grade C leaf would be virtually zero.

This subsidy makes it extremely difficult for Greece, which receives duty-free treatment as an associate EC member, to compete in the EC tobacco market. It makes it even more difficult for tobacco from the United States and other countries that do not receive duty-free treatment, to compete with EC-produced leaf.

FATS, OILS, AND OILSEEDS

Peruvian Anchovy Catch Reaches 500,000 Tons

Anchovy fishing was expected to have filled the initial 500,000-metric-ton quota on March 27. Fishing was to have been resumed on April 2 with another 500,000-ton quota but no official confirmation has been made according to the U.S. Agricultural Attaché, Lima.

The daily catch averaged about 40,000 tons during the first 2 weeks but declined to about 25,000 tons per day during the third week of fishing. The catch was evenly distributed along the central coast but the catch at Chimbote yielded less than expected. This would indicate that fishing conditions in the northern area are still recovering.

Production of fishmeal thus far is estimated at 109,000 metric tons with a meal recovery of 21.9 percent. Fish oil recovery is believed to be over 3 percent and about 15,000 tons were produced from the 500,000-ton catch. The relatively high recovery rates for oil and meal probably reflected an increased percentage catch of larger sized anchovies.

South Africa Expects Larger Peanut, Sunflower Crops in 1974

South Africa is expecting a record peanut crop of 573,000 metric tons, according to an official Government crop report. The new crop would be 394,000 tons above that of 1973. The expansion reflects improved growing conditions following last year's drought-reduced yield as well as increased plantings.

The 1974 sunflower crop is estimated at 269,000 tons, compared with 237,000 last season. The increase is primarily a result of improved yields. Sunflower acreage did not expand due to increased competition from grain plantings.

Major Market Imports of Oilseeds and Meals Up in 1973

During calendar 1973, combined net imports of oilseeds and meals into six major markets (Japan, West Germany, France, Denmark, the United Kingdom, and Spain) totaled 15.2 million metric tons (soybean-meal equivalent), 1.2 percent above the 15 million tons imported in calendar 1972.

Imports of soybeans and soybean meal during 1973 rose to 9.9 million tons, 5 percent above the 1972 volume. The net increase in imports of soybeans and meal at 492,000 tons was equal to the protein fraction of nearly 23 million bushels of soybeans. This increase substantially exceeded the increase in combined imports of all oilseeds and meals into these six countries.

Fishmeal imports in 1973 dropped to 925,000 tons (soybean-meal equivalent), 621,000 tons below the 1972 volume. The decline was equal to the protein fraction of 29 million bushels of soybeans. Reduced movements of fishmeal were offset by increased movements of soybean, cottonseed, and peanut meals.

In December 1973, aggregate imports at 1.4 million tons (soybean-meal basis) were about unchanged from the same month a year ago, but rebounded 16 percent from the November volume to the highest level since April 1973. Imports of soybeans and meal at nearly 1.1 million tons accounted for a record 77 percent of the total.

Other Foreign Agriculture Publications

- World Trade in Dairy Products Down in 1972 (FD-1-74)
- Larger 1973 Australian and South African Canned Deciduous Fruit Packs (FCAN-1-74)
- New Records Set for U.S. Trade in Livestock, Meat, and Meat Products in 1973 (FLM-MT-2-74)
- U.S. Exports of Soybeans and Meal Up Slightly; Edible Oil Exports Decline Through December 1973 (FFO-3-74)
- South Africa Anticipates Record Harvests and Exports of Grain (FG-4-74)

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High Oil Costs Pose Problems for Developing Nations

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linked to and will be affected by slowdowns in industrialized nations. These include Greece, Spain, Turkey, Yugoslavia, Algeria, and to some extent, South Korea, Taiwan, Hong Kong, and Singapore.

A fourth category outlined by Grant consists of about 40 countries that are likely to be severely affected by oil price increases. Most of these countries are in tropical Africa, South Asia, and the Central American-Caribbean area, but he also includes Uruguay, and possibly Chile and the Philippines. Combined, says Grant, these nations contain some 900 million people—nearly half the population of the developing world, excluding China.

One possibility, according to Grant, is that countries in the latter category will reduce their imports of goods for consumption and development purposes to meet oil import costs. For most, he says, this will curb growth rates and reduce living standards drastically.

Only major investment by industrialized countries will enable these LDC's to boost their food, fertilizer, and energy production, reducing dependence on high-priced imports, he continues. The establishment of new export industries would enable them to pay their vastly higher import bills.

Cutbacks in agricultural technology or investment will push food output expansion in some LDC's down to or below population growth rates. A preliminary report by the UN's Food and Agriculture Organization (FAO) suggests that a reduction in fertilizer use in LDC's of between 10-20 percent would decrease cereal output by 1.4-2.8 percent. By comparison, cereal production in LDC's increased by an average of 3.1 percent a year during 1961-71—just keeping ahead of population growth.

Even so, says FAO, oil-based farm inputs comprise a much smaller part of the value of farm output in LDC's than in developed countries. Costs for fertilizer and fuels, related to the value of farm production, range from 1.6 percent in India to 7.8 percent in such countries as Ceylon and Costa Rica.

Hardest hit, of course, will be Green Revolution crops requiring fertilization. Between 1961-72, according to FAO data, cereal yields in LDC's rose by 20 percent. Accordingly, nitrogen fertilizer consumption in 1972 was 3.5 times higher than in 1961—and almost half of nitrogen fertilizer supplies were imported, largely from developed countries.

Facing fuel costs some fourfold higher, LDC's are unlikely to be able to pay the high energy costs of technology.

One avenue open to LDC's, some experts suggest, is to replace farm energy inputs with labor inputs, which are usually plentiful. As fuel costs rise, the use of hand labor becomes more attractive. Other alternatives—such as growing legumes or utilizing manure—could hold down fuel costs.

Another means of reducing energy use would be growing grains with high protein contents or varieties with low moisture content, more efficient moisture use, or fertilizer response.

Balance of payments problems—affecting developed countries and LDC's alike—will be aggravated by energy import costs. One solution to foreign exchange problems in LDC's could be the initiation of austerity measures designed to drastically cut down on imports. These measures include duty increases, import licensing, and import bans.

Currency reserves are chronically low in the vast majority of LDC's, commercial credits are scarce, and repayment capability is low—owing to already heavy indebtedness.

But newly forged trade agreements, as well as the possibility of trade concessions, will help LDC's and other countries to meet oil needs.

India and Iran reportedly have agreed on a trade pact that includes extensive credits for India's petroleum imports from Iran for the next 5 years. In return, India will export cement, iron ore and steel products, and manufactured items. The oil import credits will free India's foreign exchange reserves for other needed imports, including food.

Because of petroleum shortages, barter arrangements have recently been concluded by Argentina (manufactured products) and Libya (oil); Brazil (sugar) and Algeria (oil); and France (military and industrial equipment) and Saudi Arabia (oil).

Proposed agreements are being negotiated by Japan (drilling equipment) and Colombia (oil), and Guyana (sugar) and both the USSR (oil) and the Arab States (oil).

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